

REMARKS

Applicant thanks the Examiner for the very thorough consideration given the present application.

Claims 1-5 are now present in this application. Claims 1 and 5 are independent.

Amendments have been made to the specification, and claims 1 and 5 have been amended. Reconsideration of this application, as amended, is respectfully requested.

Reasons for Entry of Amendments

At the outset, it is respectfully requested that this Amendment be entered into the Official File in view of the fact that the amendments to the claims automatically place the application in condition for allowance.

In the alternative, if the Examiner does not agree that this application is in condition for allowance, it is respectfully requested that this Amendment be entered for the purpose of appeal. This Amendment reduces the issues on appeal by placing the claims in compliance with 35 U.S.C. § 112, 1st Paragraph. This Amendment was not presented at an earlier date in view of the fact that Applicant did not fully appreciate the Examiner's position until the Final Office Action was reviewed.

Specification Objection

The Examiner has objected to the specification as failing to provide antecedent basis for the claimed subject matter. Particularly, the Examiner asserts that "smooth screen edges are obtained for the effective surface of the shadow mask at every length of the first slots between and inclusive of 70% - 110% of a vertical length of a fourth slot" as recited in amended claim 1 is not supported by the specification. In order to overcome this objection, Applicant has amended the specification in order to correct the deficiencies pointed out by the Examiner. More specifically, paragraph [0029] has been amended to recite slots are formed to have luminescent body, radiated from an end of a long side of a shadow mask not having a convexo-concave shape but having smooth screen edges (a straight effective surface). Applicant respectfully submits that the specification, as amended, provides proper antecedent basis for the claimed subject matter. Reconsideration and withdrawal of this objection are respectfully requested.

Claim Amendments

Applicant has amended the claims in order to correct minor typographical errors, and to place the claims in better form. The claim amendments are not being made in response to any statutory requirement for patentability, and have not been narrowed in scope. Instead, the claims have been amended merely to

Rejection Under 35 U.S.C. § 112, 1st Paragraph

Claim 1-4 stands rejected under 35 U.S.C. § 112, 1st Paragraph. This rejection is respectfully traversed.

The Examiner states that independent claim 1 recites "smooth edges are obtained for the effective surface of the shadow mask at every length of the first slots between and *inclusive* of 70% -110% of a vertical length of a fourth slot, "and that the specification does not disclose that each slot length can have every possible value between and inclusive of the claimed range. The Examiner acknowledges that the specification discloses that the length of the first slot is within the range 70% -110% *and inclusive*.

In order to overcome this rejection, Applicant has amended independent claim 1 to recite smooth screen edges are obtained for the effective surface of the shadow mask at vertical lengths of the first slots between a range of 70%-110% of a vertical length of a fourth slot, inclusive. Applicant submits that independent claim 1, as amended, corrects the deficiency specifically pointed out by the Examiner, and therefore claims 1-4 contains subject matter which was described in the specification in such a way as to reasonable convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Accordingly, reconsideration and withdrawal of this rejection are respectfully requested.

Rejection Under 35 U.S.C. § 112, 2nd Paragraph

Claims 1-4 stand rejected under 35 U.S.C. 2nd paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. This rejection is respectfully traversed.

Applicant respectfully submits that the amendment to independent claim 1 renders claims 1-4 definite. Particularly, independent claim 1, as amended recites vertical lengths of the first slots, making it clear which length Applicant is referring to. Also, the specification, as amended, provides a standard for ascertaining the requisite degree of the smoothness of the screen edges. For example the specification recites "a straight effective surface". Further, claim 1, as amended, no longer recites "every length" of the first slots. Rather, as provided above, claim 1 recites "vertical lengths of the first slots". Reconsideration and withdrawal of this rejection are respectfully requested.

Rejection Under 35 U.S.C. § 102

Claims 1-5 stand rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 4,631,440 to Robbins. This rejection is respectfully traversed.

A complete discussion of the Examiner's rejection is set forth in the Office Action, and is not being repeated here.

In the device of Robbins, smooth screen edges (straight effective surface) are

claimed invention, good results, including smooth screen edges are obtained in the range between 70% and 110% of a full length slot (inclusive of the 70% and 110%). By contrast, *Robbins is silent* as to results obtained (smooth screen edges) for first slots having a length of (for example) 110% of a length of a full-length slot. The effective range of Robbins is much narrower than the claimed range, and does not encompass all of the claimed lengths, especially first slot lengths greater than a length of 80% of a length of a full length slot. For example, Robbins does not encompass a length of 110% of a length of a full-length slot. Therefore, the '102 rejection is not proper. Particularly, Robbins fails to teach smooth screen edges are obtained for the effective surface of the shadow mask at vertical lengths of the first slots between a range of 70%-110% of a vertical length of a fourth slot, inclusive, as recited in independent claim 1, as amended.

With regard to independent claim 5, in the preferred embodiment of Robbins, smoother screen edges are said to be produced by slightly extending partial slots beyond the edge of the aperture array, that is, beyond the adjacent longer slots. The mask of the preferred embodiment is shown in FIG. 3, wherein an exaggerated computer plot of an array in which the slot length and the number of pitches is kept constant, and in which partial slots 34 in odd numbered columns extend beyond the full length slots 33 in even numbered columns by a constant amount (see Robbins, Col.4, lines 33-38). With this arrangement, the full-length first slots 33 of Robbins can never be connected with the edge of the

FIG. 3 is a schematic diagram of a shadow mask 21. The mask 21 must extend beyond

the full-length slots, bridges portions (not slots) are connected to the edge of the effective area of the mask.

Therefore, Robbins fails to teach all of said first slots having an outer edge portion thereof connected to and extending from an edge of an effective area of the shadow mask, as recited in independent claim 5 (as amended).

Claims 2-4 depend, either directly or indirectly on independent claim 1, and therefore are patentable at least for the reasons stated with respect to independent claim 1. Reconsideration and withdrawal of this art grounds of rejection are respectfully requested.

Conclusion

All of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider all presently outstanding rejections and that they be withdrawn. It is believed that a full and complete response has been made to the outstanding Office Action, and as such, the present application is in condition for allowance.

If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone Percy L. Square, Registration No. 51,084, at (703) 205-8034, in the Washington, D.C. area.

Application No.: 09/927,361
Art Unit 2879

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
If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

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JTE/PLS:gf

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Attachment:

Five (5) Sheets of Corrected Formal Drawings